

A LIST OF THE LAND-SHELLS OF THE ISLANDS OF BATCHIAN, TERNATE, AND GILOLO.

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HERR BRUNO STRUBELL recently sent me for identification a small collection of land-shells from the above islands, and among them occurred the two new species about to be described. In the course of examining the literature dealing with the fauna of these islands, I have brought together the following lists,¹ which it appeared useful to publish. Only those species which have been quoted from one or other of these islands are referred to. A number of forms have been assigned to the "Moluccas," among which a few may possibly occur at one or other of the islands under consideration, but at present we await further information regarding their special "habitats" to enable us to range them under their proper localities. I have not given references, since most of these may be obtained in the Manual of Conchology, second series, by Tryon and Pilsbry.

The following are the principal works and papers dealing with the subjects:—

1. Martens (E. von). "Die preussische Expedition nach Ost-Asien," Zool., vol. ii, pp. 99-415.
2. Böttger (O.). Berlin Senckenb. Gesell. 1891, pp. 241-318.
3. Strubell (B.). Nachrichtsb. deutsch. mal. Gesell. 1892, pp. 41-50.
4. Tapparone-Canefri (C.). Ann. Mus. Civ. Genova, 1884, vol. xx, pp. 143-169.

(1) FROM BATCHIAN.

<i>Lamprocystis subangulata</i> , Bttgr.	<i>Planispira atrofusca</i> , Pfr.
<i>Xesta sulfurata</i> , Martens.	— <i>Scheepmakeri</i> , Pfr.
— <i>luctuosa</i> , Beck.	— <i>exceptiuncula</i> , Fér.
— <i>ignescens</i> , Pfr.	— <i>aspasia</i> , H. Ad.
<i>Trochomorpha Ternatana</i> , Le Guil.	— (<i>Cristigibba</i>) <i>corniculum</i> ,
— <i>planorbis</i> , Lesson.	Hom. and Jacq.
[— <i>Batchianensis</i> , Pfr. = <i>Ternatana</i> .]	— — <i>expansa</i> , Pfr.
<i>Eulota (Plectotropis) Winteriana</i> ,	— — <i>Moluccensis</i> , ² Pfr.
v. d. Busch.	— — <i>lacteocincta</i> , Smith.
<i>Planispira Kurri</i> , Pfr.	<i>Albersia zonulata</i> , Fér.
— <i>compta</i> , H. Ad.	— <i>pubiceps</i> , Martens.
— <i>zonalis</i> , Fér.	<i>Papuina Gaberti</i> , Lesson.
— <i>endoptycha</i> , Martens.	— <i>pileolus</i> , Fér.
— <i>loxotropis</i> , Pfr.	— <i>rhynchostoma</i> , Pfr.
	— <i>nodifera</i> , Pfr. (?)

¹ These do not include the few species of Auriculidæ recorded from these localities.

² This name was changed by Von Martens to *semirasa*, as he believed the species did not occur in the Moluccas. Specimens from Batchian, however, are in the collection of Herr Strubell.

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| <i>Pyrochilus sulcocinctus</i> , Martens. | <i>Leptopoma Papuanum</i> , Dohrn. |
| — <i>pyrostoma</i> , Fér. | — <i>Manadense</i> , Pfr. |
| — <i>xanthostoma</i> , Herkl. | <i>Cyclotus guttatus</i> , Pfr. |
| <i>Pupina Pfeifferi</i> , H. Ad. (non Dohrn). | — <i>plicosus</i> , Martens. |
| <i>Diancta torta</i> , Bttgr. | — <i>Batchianensis</i> , Pfr. ¹ |
| <i>Cyclophorus leucorhaphé</i> , Martens. | <i>Helicina electrina</i> , Pfr. |
| <i>Leptopoma globulosum</i> , Pfr. | — <i>parva</i> , Sow. |
| — <i>vitreum</i> , Lesson. | <i>Georissa crebrilirata</i> , Bttgr. |
| — <i>pellucidum</i> , Grat. | |

(2) FROM TERNATE.

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| <i>Lamprocystis subangulata</i> , Bttgr. | <i>Opeas Panayensis</i> , Pfr. |
| <i>Xesta aulica</i> , Pfr. | — <i>Javanica</i> , Rve. |
| <i>Trochomorpha planorbis</i> , Lesson. | — <i>clavulina</i> , Pot. et Mich. |
| — <i>Ternatana</i> , Le Guil. | — <i>Ternatana</i> , Bttgr. |
| <i>Planispira exceptiuncula</i> , Fér. | <i>Diancta constricta</i> , Martens. |
| — <i>endoptycha</i> , Martens. | <i>Leptopoma vitreum</i> , Less. |
| — <i>quadrifasciata</i> , Le Guil. | <i>Cyclotus (Eucyclotus) pruinosus</i> , |
| — <i>loxotropis</i> , Pfr. | Martens. |
| — <i>atacta</i> , Pfr. | — (<i>Pseudocyclophorus</i>) <i>guttatus</i> , |
| <i>Papuina vitrea</i> , Fér. (= <i>albula</i> , | Pfr. |
| Le Guil.). | — (<i>Platyrhaphé</i>) <i>parvulus</i> , |
| — <i>lanceolata</i> , Pfr. | Martens. |
| <i>Clausilia Cumingiana</i> , Pfr., var. | |
| <i>Moluccensis</i> . | |

(3) FROM GILOLO.

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| <i>Lamprocystis subangulata</i> , Bttgr. | <i>Planispira Phryne</i> , Pfr. |
| — <i>Ambonica</i> , Bttgr. (var.). | — (<i>Cristigibba</i>) <i>Giloloensis</i> , |
| <i>Xesta citrina</i> , Linn. | Smith. |
| — <i>aulica</i> , Pfr. | <i>Camana (Pseudobba) Brunonis</i> , |
| — <i>sulfurata</i> , Martens. | Kobelt. ³ |
| <i>Trochomorpha planorbis</i> , Lesson. | <i>Albersia pseudocorasia</i> , Strubell. |
| — <i>Ternatana</i> , Le Guil. | — <i>pubiceps</i> , Martens. |
| <i>Eulota (Plectotropis) Winteriana</i> , | <i>Obba calcar</i> , Martens. |
| Pfr. | <i>Papuina vitrea</i> , Fér. (= <i>albula</i> , |
| <i>Planispira zonaria</i> , Linn. | Le Guil.). |
| — <i>Halmaherica</i> , Strubell. | — <i>chondrodes</i> , Strubell. |
| — <i>Tietzeana</i> , Rolle. ² | — <i>lanceolata</i> , Pfr. |
| — <i>quadrifasciata</i> , Le Guil. | <i>Pyrochilus pyrostoma</i> , Fér. |
| — <i>Thetis</i> , Pfr. | — <i>lampas</i> , Müll. |
| — <i>loxotropis</i> , Pfr. | <i>Clausilia Cumingiana</i> , Pfr., var. |
| — <i>atacta</i> , Pfr. | <i>Moluccensis</i> , Martens. |
| — <i>zonalis</i> , Pfr. | <i>Cyclophorus leucorhaphé</i> , Martens. |
| — <i>exceptiuncula</i> , Fér. | <i>Leptopoma vitreum</i> , Lesson. |

¹ The young of this species is figured by Reeve as a *Cyclotus*, Conch. Icon., fig. 46; the adult as a *Pterocyclos*, op. cit., figs. 6a, b.

² Nachrichtsbl. deutsch. mal. Gesell. 1893, p. 33.

³ Conch.-Cab., *Helix*, p. 681, pl. exev, figs. 1-3.

Leptopoma Halmahericum, Strubell.
 — *erenilabre*, Strubell.
 — *cinctellum*, Pfr.
Cyclotus pruinusos, Martens.

Cyclotus plicosus, Martens.
Omphalotropis Ceramensis, Pfr.
Helicina parva, Sow.
 — *zoa*, Pfr.

DESCRIPTION OF THE NEW SPECIES.

1. PLANISPIRA (CRISTIGIBBA) GILOLOENSIS, n.sp. Figs. 1, 2.

Testa anguste umbilicata, orbicularis, alba, lineis incrementi tenuibus striata; spira concave depressa; anfractus 4, convexi, ultimus irregularis, pone aperturam gibbosus et inferne subinflatus, antice leviter descendens; apertura alba, oblique lunata; peristoma album, anguste expansum, marginibus conniventibus. Diam. maj. 14.5, min. 11.5, alt. 8 mm.

Hab.—Halmahera or Gilolo Island.

This species somewhat resembles *Helix leptocheila*,¹ as regards form. The colour and also the shape of the aperture, however, are different.



2. PLANISPIRA (CRISTIGIBBA) LACTEOCINCTA, n.sp. Figs. 3, 4.

Testa orbicularis, anguste umbilicata, sordide albida, fasciis rufonigris 1-2 et fascia mediana opaca lactea ornata, epidermide crassiuscula induta; spira plana, in medio leviter depressa; anfractus 4, convexi, ultimus antice breviter descendens, lineis incrementi leviter obliquis sculptus, inferne aperturam versus subinflatus, dein constrictus; apertura late lunata, intus concolor, zonis externis translucentibus; peristoma anguste expansum, albidum, marginibus conniventibus, columellari leviter reflexo. Diam. maj. 16, min. 13, alt. 8 mm.

Var. Testa pallida, zona opaca lactea ad peripheriam ornata. Diam. maj. 15, min. 11 mm.

Hab.—Batehian or Batjan Island.

Both the specimens of this interesting species have the opaque, cream-coloured zone at the periphery, but only one of them is ornamented with colour-bands. The upper zone is upon the upper surface of the body-whorl, the lower one being at the periphery and bordered below by the opaque, cream-coloured band. None of the bands reach to the peristome, and the whitish zone extends only about half-way round the whorl. The constriction and gibbosity of the body-whorl behind the lip are only observable upon the lower surface.

¹ Tapparone-Canefri, Ann. Mus. Civ. Genova, xx, 1884, pl. i, figs. 14-16. Pilsbry, Man. Conch., ser. II, vol. vi, pl. lxi, figs. 25-7.